

The Mediating Roles of Anticipated Risks, Anticipated Benefits, and Attitudes on the Decision to Seek Professional Help: An Attachment Perspective

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This study examined the mediating effects of anticipated risks, benefits, and attitudes toward seeking counseling on the link between adult attachment and help-seeking intentions for psychological and interpersonal concerns in a sample of 821 undergraduates. The structural equation modeling results indicated that the link between higher attachment avoidance and less intent to seek help was mediated by lower anticipated benefits, higher anticipated risks, and less positive attitudes toward seeking help. Conversely, the link between higher attachment anxiety and greater intent to seek help was mediated by higher anticipated benefits and risks and more positive attitudes toward seeking help. Thus, attachment contributed to perceptions of the benefits and risks of counseling, which, in turn, influenced help-seeking attitudes and, eventually, help-seeking intentions.

Keywords: help-seeking attitudes and intentions, adult attachment, mediation, anticipated risks, anticipated benefits

Counseling suffers from one serious limitation: It can only help those who seek it out. Research suggests that over two thirds of individuals who could benefit from counseling never enter a therapist's office (Andrews, Issakidis, & Carter, 2001). To reach those who need services, the field needs to gain a more comprehensive understanding of the factors influencing an individual's decision to seek help (Komiya, Good, & Sherrod, 2000). One promising avenue for developing a more complete picture of this decision-making process is to study variables that influence how people perceive counseling, in terms of both its potential benefits and its potential risks (Vogel & Wester, 2003; Vogel, Wester, Wei, & Boysen, 2005).

Adult attachment has been presented as one possible explanation for how individuals evaluate the potential benefits and risks of seeking help when confronted by psychological stressors (Feeney & Ryan, 1994; Lopez, Melendez, Sauer, Berger, & Wyssmann, 1998; Vogel & Wei, 2005). As originally conceived, attachment theory (Bowlby, 1988) hypothesized that evolution furnished human infants with an innate biological drive aimed at maintaining proximity to caregivers, thus enhancing safety and the likelihood of survival. Different patterns of attachment behavior arise as infants learn what is and is not effective at keeping caregivers close. Hazan and Shaver (1987) subsequently applied attachment theory to the study of adult romantic relationships, on the basis of the belief that early attachment experiences with caregivers might

lay the groundwork for the creation of habitual ways of relating to others later in life. In particular, adult attachment theory posits that individuals develop internal working models representing their expectations regarding themselves and others in close relationships on the basis of their past experiences in such relationships (for a review, see Pietromonaco & Feldman Barrett, 2000). These internal working models provide a relatively stable lens through which adults evaluate their interpersonal relationships and determine whether a person seeks interpersonal closeness or distance in reaction to distressing events or situations (Hazan & Shaver, 1987). Given that psychotherapy is a type of interpersonal relationship (e.g., Teyber, 2005), these internal lenses should influence how individuals evaluate the prospect of seeking help and whether they ultimately decide to seek or avoid help (Vogel & Wei, 2005).

Recently, Brennan, Clark, and Shaver (1998) identified two specific adult attachment dimensions (i.e., attachment *avoidance* and attachment *anxiety*) that influence how individuals view themselves and others. In reaction to consistently negative caregiver experiences, individuals with high levels of attachment avoidance are hypothesized to have developed a negative internal working model of others, seeing them as untrustworthy and unlikely to provide assistance (Griffin & Bartholomew, 1994). Consequently, these individuals are likely to use deactivating strategies (e.g., keeping distance from others and self-reliance) to regulate their distress (Lopez & Brennan, 2000; Mikulincer, Shaver, & Pereg, 2003; Wei, Vogel, Ku, & Zakalik, 2005). Thus, individuals with attachment avoidance who experienced their caregivers as cold and rejecting might expect similar reactions from mental health professionals, which would lead them to view counseling as a risky endeavor. Such individuals might also, because of their lack of positive experiences with caregivers, be less aware of how counseling could benefit them.

Conversely, individuals who experienced their caregivers as unpredictable and highly variable in supportiveness are hypothe-

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sized to have developed high levels of attachment anxiety and a negative internal working model of self, doubting their self-worth and competence. These individuals tend to respond to distress with the use of hyperactivating strategies (Lopez & Brennan, 2000; Mikulincer et al., 2003; Wei, Vogel, et al., 2005) and an outward reliance on others for assistance and support. In addition, these individuals may frequently worry about whether others will reject or tire of them, because they do not perceive themselves as worthy of support. In light of this, it seems reasonable that individuals with attachment anxiety would apply these tendencies and expectations to counseling, believing it could offer them support and benefits. In addition, because of their fears regarding the acceptance of others, one might expect individuals with attachment anxiety to fear the possible risks of counseling, such as not being accepted or liked by helping professionals.

In sum, different internal working models or cognitive processes should lead to differences in the help-seeking choices of individuals experiencing attachment anxiety or avoidance. Attachment avoidance (e.g., negative internal working model of others) may hinder a person from seeking counseling, both by lowering awareness of the possible benefits and by heightening awareness of the possible risks of seeking help. Conversely, attachment anxiety (e.g., negative internal working model of self) may facilitate the use of counseling by heightening awareness of the potential benefits but also may hinder service usage by heightening awareness of the potential risks.

Consistent with these theoretical assertions, individuals with attachment avoidance have been found to engage in less self-disclosure to others (Dozier, 1990; Wei, Russell, & Zakalik, 2005) and are less willing to acknowledge distress (Vogel & Wei, 2005). Both Feeney and Ryan (1994) and Vogel and Wei (2005) have reported that those with higher levels of attachment avoidance report less intention to seek psychological help. In addition, Lopez et al. (1998) found that, among individuals experiencing psychological problems, those with a negative model of others (i.e., high levels of attachment avoidance) were less willing to seek counseling than those with positive models of others. These tendencies have also been found in day-to-day support interactions. Collins and Feeney (2000) found that individuals who were high in avoidance preferred to use indirect strategies for obtaining support in their close relationships and did not respond to increased levels of distress by seeking additional support. Such individuals might shy away from forming relationships with a counselor as part of a strategy of avoiding direct requests for assistance. In an observational study of separating couples in airports, Fraley and Shaver (1998) noted similar results, in that avoidant women were less likely to seek proximity and comfort from their partner than nonavoidant women (although this effect was not significant in men). Furthermore, one study examining whether the quality of attachment contributed to seeking academic help from a teacher found that college students with greater attachment avoidance tended to have more negative expectations regarding the effectiveness of seeking support, which decreased the probability that they would seek help from a teacher (Larose, Bernier, Soucy, & Duchesne, 1999). Thus, not only are those with attachment avoidance less likely to seek help, attachment avoidance also appears to indirectly decrease help seeking by lowering perceptions of its helpfulness.

Individuals with higher levels of attachment anxiety, in turn, are more likely to self-disclose problems to others (Dozier, 1990). Higher comfort with self-disclosing distressing information has been linked to an increased likelihood of seeking help from a counselor (Vogel & Wester, 2003). Vogel and Wei (2005) also found positive associations between higher levels of attachment anxiety and both a greater willingness to acknowledge psychological distress and a greater intention to seek psychological help. It is interesting, however, that Satterfield and Lyddon (1995) found that individuals with attachment anxiety, although they sought help more readily, rated the early phases of the therapeutic relationship more negatively. In addition, Fraley and Shaver (1998) found that anxiously attached men separating from their partner in an airport engaged in fewer proximity-seeking behaviors. These findings may imply that although those with attachment anxiety want to seek help, they may feel ambivalent about the help-seeking process in certain situations.

The studies we have reviewed provide some initial links among attachment, anticipated risks and benefits, and help-seeking intentions. These direct links suggest that anticipated risks and benefits might mediate the help-seeking process for individuals with insecure attachments. Yet the specific mediating roles that anticipated risks and benefits play in the relation between attachment and the intention to seek psychological help have not been directly tested. In fact, we could not locate a single published study that has explicitly examined the role of attachment and the effects of either anticipated risks or anticipated benefits on attitudes and intentions to seek help. Thus, although there is evidence that anticipated risks and benefits have direct effects on both attitudes and intentions to seek professional help (e.g., Vogel & Wester, 2003; Vogel, Wester, et al., 2005), their effects on how attachment influences an individual's decisions to seek professional help need to be better understood.

Furthermore, additional research on how attachment insecurity affects college students' psychological help seeking is needed. Much of the attachment literature has focused on college student populations (e.g., Lopez & Gormley, 2002; Wei, Vogel, et al., 2005). This is not surprising, as Levine and Cureton (1998) have reported that today's generation of college students enter college feeling "overwhelmed and more damaged than in previous years" (p. 5) and possess fewer social supports than in the past. Benton, Robertson, Tseng, Newton, and Benton (2003) have also reported increases in college students' concerns about loneliness, depression, and other interpersonal issues. However, despite this rise in distress and interpersonal concerns in college populations, only one study has linked attachment and help-seeking intentions. Vogel and Wei (2005) found that college students with attachment avoidance or attachment anxiety reported different patterns of help-seeking intentions. As such, it is important to continue this line of research to determine which factors (i.e., anticipated risks and benefits of seeking help and attitude toward help seeking) contribute to decisions to seek professional help among college students experiencing attachment avoidance and attachment anxiety. This research is necessary to develop a more complete model of how college students with insecure attachment approach the decision to seek help from a mental health professional and for the development of interventions designed to increase usage of mental health services by college students.

Current Study

To fill these gaps in the help-seeking literature, we attempt to confirm and extend previous findings with structural equation modeling (SEM) to test a model in which anticipated risks and anticipated benefits mediate the relation between adult attachment and help-seeking intentions for psychological and interpersonal concerns. Using SEM allows researchers to improve the accuracy of results by reducing measurement error. Our approach builds on the previous work of Vogel and Wester (2003), who examined a general model of help seeking based on Ajzen and Fishbein's (1980) theory of reasoned action. According to this model, one of the primary determinants of help-seeking intentions is one's attitude toward the counseling process. These attitudes are formed through an evaluation and weighting of the anticipated outcomes (i.e., the benefits and risks) of seeking help (Vogel & Wester, 2003). The possible benefits of counseling include distress reduction, increased positive affect, and the attainment of support. The possible risks of counseling include fear of violating gender role expectations (Brooks, 1998), embarrassment over sharing problems with strangers (Lin, 2002), and fears surrounding self-disclosure (Vogel & Wester, 2003). Thus, on the basis of this model, these perceptions of the benefits and risks should directly influence one's attitudes, which, in turn, should influence one's behavioral intentions.

We attempt to expand on this previously identified model by hypothesizing that the relations between attachment avoidance and attachment anxiety, on the one hand, and intentions to seek counseling for psychological and interpersonal concerns, on the other, will be indirectly mediated by (a) first the anticipated risks and anticipated benefits and then attitudes toward seeking help and (b) the anticipated risks and benefits only (see Figure 1). In particular, we hypothesized that (a) attachment avoidance would be positively associated with anticipated risks and negatively associated with anticipated benefits, whereas attachment anxiety would be positively associated with both anticipated risks and benefits; (b)

anticipated risks would be negatively associated with attitudes and intentions to seek help, but anticipated benefits would be positively associated with attitudes and intentions to seek help; (c) attitudes would be positively associated with intentions to seek counseling for psychological and interpersonal concerns; and, finally, (d) attachment avoidance would be negatively associated with intentions to seek help, but attachment anxiety would be positively associated with intentions to seek help. Although attachment may play an important role in the help-seeking process, it is difficult to change a person's level of attachment avoidance or anxiety. However, if the hypothesized model is supported by the present study, these factors could be used to develop intervention tools to encourage college students with insecure attachment to enter counseling and ensure that they do not terminate prematurely (i.e., by decreasing the levels of anticipated risks and increasing the levels of anticipated benefits and positive attitude toward help seeking). Thus, a better understanding of how attachment relates to the help-seeking decision process among college students can be used to boost service usage through outreach and educational programs.

Method

Participants

We recruited 821 undergraduate students enrolled in psychology classes at a large midwestern university to participate in this study. Roughly half of the sample was female (53%, $n = 432$), with men making up the remaining 47% ($n = 389$). Because of the introductory nature of the courses from which we sampled, most participants were freshmen (58%), followed by sophomores (25%), juniors (10%), and seniors (6%). Most participants were European American (91%), with the remainder split among Asian American (2%), African American (2%), biracial or multi-racial American (2%), Latino/a American (1%), and other (1%). This breakdown, although highly homogenous in terms of ethnicity, is representative of the university at which the study was conducted.

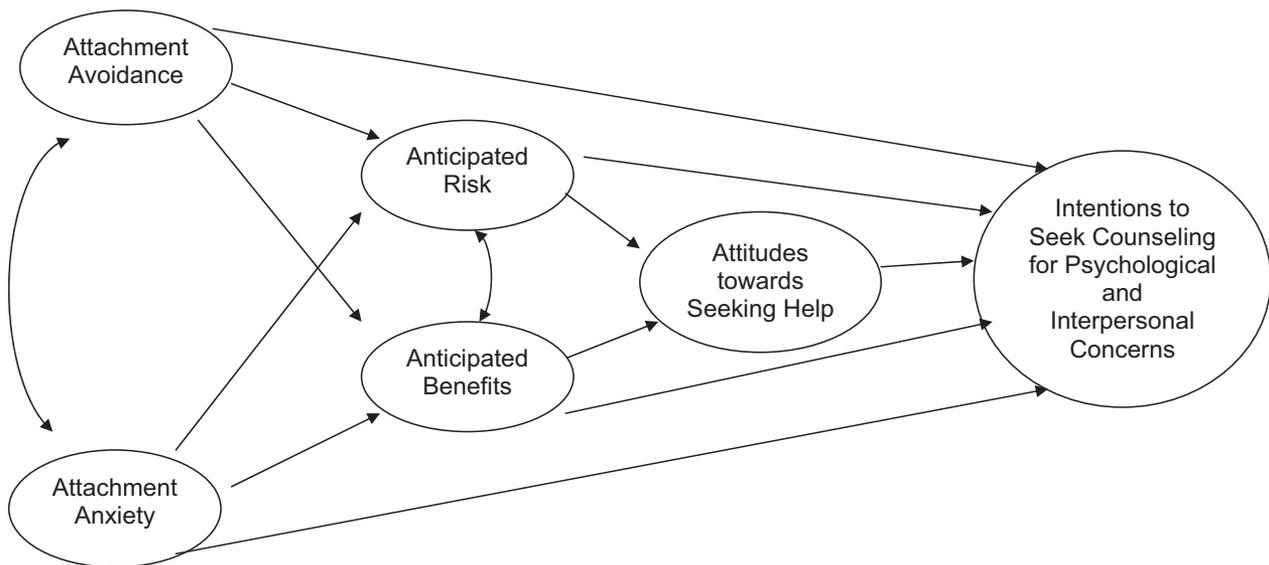


Figure 1. Hypothesized mediated model.

Measures

Attachment. Various competing methods for measuring adult attachment have been proposed, with some treating the construct as categorical (with individual differences reflecting qualitative differences in expectations and behavior) and others considering it to be dimensional in nature (with individual differences reflecting quantitative differences along a spectrum). As theoretical justifications have been proposed for both methodologies, Fraley and Waller (1998) have suggested that the question be decided on the basis of empirical support. Using taxometric procedures (for an introduction, see Meehl, 1992) designed to determine whether a construct reflects latent categories or latent dimensions, Fraley and Waller found significantly more support for the dimensional approach. Thus, in the present study, attachment orientation was measured with the Experiences in Close Relationships Scale (ECRS; Brennan et al., 1998). The ECRS is a 36-item self-report measure of adult attachment dimensions. For each item, participants rate how well the statement describes their typical experiences in romantic relationships. Responses are rated on a 7-point Likert-type scale from 1 (*disagree strongly*) to 7 (*agree strongly*). A factor analysis of the ECRS identified two relatively orthogonal attachment dimensions: anxiety and avoidance. The Anxiety subscale (18 items) taps fears of rejection and preoccupation with abandonment, whereas the Avoidance subscale (18 items) assesses fear of intimacy and discomfort with getting close to others or dependence. Higher scores on these subscales indicate higher attachment anxiety and attachment avoidance. Brennan et al. reported coefficient alphas of .91 and .94 for the Anxiety and Avoidance subscales, respectively. In the present study, internal consistency was .92 for the Anxiety subscale and .93 for the Avoidance subscale. Test-retest reliabilities for the ECRS have been reported to be between .68 and .71 for both subscales (Brennan, Shaver, & Clark, 2000; Lopez & Gormley, 2002). In terms of validity, the Anxiety subscale has been linked to greater willingness to acknowledge distress ($r = .59$; Vogel & Wei, 2005) and greater use of hyperactivation strategies ($r = .39$; Wei, Vogel, et al., 2005), whereas the Avoidance subscale has been linked to less perceived social support ($r = -.42$; Vogel & Wei, 2005) and greater use of deactivating strategies in response to distress ($r = .33$; Wei, Vogel, et al., 2005).

Following the recommendation of Russell, Kahn, Spoth, and Altmaier (1998), we created observed indicators (or parcels) for the two latent variables of attachment anxiety and attachment avoidance. In particular, we created three indicators (or parcels) for the attachment anxiety latent variable and three indicators for the attachment avoidance latent variable. The decision to create indicators (or parcels) was based on (a) the desire to meet the assumptions of the maximum likelihood method associated with SEM analyses (i.e., helping to account for possible violations in multivariate normality, which are often problematic when individual items are used) and (b) the desire to reduce the number of parameters that would

result if we were to use individual items, thereby improving model fit as a result of the more limited number and better distribution of the parameters (for a discussion, see Russell et al., 1998).

We created the parcels using separate exploratory factor analyses with the maximum likelihood method on the 18 items making up the Anxiety subscale and the 18 items making up the Avoidance subscale. We rank-ordered the items for each subscale on the basis of the magnitude of their factor loadings and successively assigned pairs of the highest and lowest items to a parcel (i.e., each of the three parcels were assigned three high-low pairs) to equalize the average loadings of each parcel on its respective factor (see Table 1 for scale descriptive statistics and correlations and Table 2 for parcel descriptive statistics and correlations).

Anticipated risks and anticipated benefits. The anticipated risks and anticipated benefits of seeking help from a counselor were measured with the Disclosure Expectations Scale (DES; Vogel & Wester, 2003). The DES is an eight-item measure assessing participants' expectations about the risks and benefits associated with talking about an emotional problem with a counselor. Anticipated risks and benefits are each measured by four items rated on a Likert-type scale from 1 (*not at all*) to 5 (*very*). Responses are summed for each subscale, with higher scores reflecting greater anticipated risks and greater anticipated benefits. The Anticipated Risks subscale consists of items such as "How risky would it feel to disclose your hidden feelings to a counselor?" and the Anticipated Benefits subscale consists of items such as "How helpful would it be to self-disclose a personal problem to a counselor?" Factor analysis has revealed two factors that are only minimally correlated ($r = -.19$; Vogel & Wester, 2003). The internal consistencies for the scales have been reported as .74 for Anticipated Risks and .83 for Anticipated Benefits (Vogel & Wester, 2003). The internal consistencies for the scales in the current study were .80 for Anticipated Risks and .87 for Anticipated Benefits.

The DES treats expectations as a trait variable that is stable over time, with adequate test-retest reliability in a new data set collected for the present study ($N = 41$; $r = .77$ for Anticipated Risks and $r = .75$ for Anticipated Benefits over a period of 2 weeks). Vogel, Wester, et al. (2005) have more explicitly addressed this issue, showing that expectations of the risks and benefits at one time point can predict help seeking 2 to 3 months later. In the same study, Vogel et al. reported correlations between the DES and other trait measures of comfort with self-disclosure ($r = -.20$ and $.28$ for risks and benefits, respectively). The Anticipated Risks subscale has been shown to correlate negatively with self-disclosure ($r = -.19$) and intentions to seek counseling ($r = -.25$); conversely, the Anticipated Benefits subscale has demonstrated a positive correlation with self-disclosure ($r = .24$) and intentions to seek counseling ($r = .27$; Vogel & Wester, 2003). Moreover, Vogel, Wade, and Haake (2006) found that individuals who anticipated greater risk from counseling also found counseling to elicit greater self-stigma (r 's = $.30$ to $.47$), whereas those who

Table 1
Means, Standard Deviations, and Zero-Order Correlations Among the Overall Scale Scores

Scale	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. Anxiety	62.60	19.31	—	.17***	.18***	.16***	.02	.20***
2. Avoidance	51.56	18.66		—	.21***	-.08*	-.11**	-.09*
3. Risks	12.40	3.57			—	-.09*	-.24***	-.10*
4. Benefits	12.04	3.67				—	.50***	.47***
5. Attitude	21.66	5.24					—	.54***
6. Intent	20.13	6.07						—

Note. $N = 821$. Anxiety and Avoidance = the Anxiety and Avoidance subscales from the Experiences in Close Relationship Scale; Risks and Benefits = the Risks and Benefits subscales from the Disclosure Expectations Scale; Attitude = the Attitude Toward Seeking Professional Psychological Help Scale; Intent = the Psychological and Interpersonal Concerns subscale from the Intentions to Seek Counseling Inventory.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 2
Means, Standard Deviations, and Zero-Order Correlations Among 16 Observed Variables

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Anxiety 1	23.17	7.36	—	.83	.82	.06	.23	.08	.17	.15	.14	.18	-.02	-.02	.12	.18	.15	.24
2. Anxiety 2	21.87	7.28		—	.81	.16	.30	.15	.17	.13	.11	.13	-.06	-.08	.06	.13	.10	.19
3. Anxiety 3	21.52	7.09			—	.08	.19	.09	.16	.11	.14	.18	-.00	.00	.14	.17	.14	.23
4. Avoidance 1	16.98	6.85				—	.81	.86	.21	.18	-.09	-.10	-.14	-.12	-.08	-.14	-.12	-.08
5. Avoidance 2	16.98	7.01					—	.82	.20	.19	-.02	-.04	-.10	-.10	-.01	-.04	-.04	.01
6. Avoidance 3	18.13	7.71						—	.16	.14	-.09	-.09	-.11	-.11	-.04	-.10	-.10	-.05
7. Risks 1	14.32	2.06							—	.66	-.04	-.05	-.17	-.22	-.15	-.07	-.07	-.07
8. Risks 2	13.12	2.13								—	-.10	-.10	-.22	-.22	-.15	-.11	-.11	.10
9. Benefits 1	14.00	1.92									—	.80	.39	.41	.42	.44	.38	.39
10. Benefits 2	13.75	2.17										—	.39	.43	.44	.47	.39	.39
11. Attitude 1	12.66	1.93											—	.58	.82	.44	.42	.39
12. Attitude 2	14.37	1.94												—	.59	.49	.41	.39
13. Attitude 3	13.33	3.93													—	.48	.43	.42
14. Intent 1	12.69	4.45														—	.78	.76
15. Intent 2	10.68	3.75															—	.75
16. Intent 3	5.58	1.95																—

Note. $N = 821$. Absolute values of correlations greater than or equal to .07 were significant at $p < .05$; absolute values of correlations greater than .08 were significant at $p < .01$. Anxiety 1, 2, 3 = the Anxiety subscale (three parcels) from the Experiences in Close Relationship Scale; Avoidance 1, 2, 3 = the Avoidance subscale (three parcels) from the Experiences in Close Relationship Scale; Risks 1, 2 = the Risks subscale (two parcels) from the Disclosure Expectations Scale; Benefits 1, 2 = the Benefits subscale (two parcels) from the Disclosure Expectations Scale; Attitude 1, 2, 3 = the Attitude Toward Seeking Professional Psychological Help Scale (three parcels); Intent 1, 2, 3 = the Psychological and Interpersonal Concerns subscale (three parcels) from the Intentions to Seek Counseling Inventory.

anticipated greater benefits found counseling to be less self-stigmatizing (r 's = $-.32$ to $-.45$). Given that the Anticipated Risks and Anticipated Benefits scales contain only four items each, it was not possible to create three multi-item parcels using the procedure we have described. Thus, we created two parcels for each latent variable (anticipated risks and anticipated benefits).

Attitudes toward seeking professional help. Attitudes toward seeking professional help were measured with the Attitudes Toward Seeking Professional Psychological Help Scale (Fischer & Farina, 1995). This is a shortened 10-item revision of the original 29-item measure (Fischer & Turner, 1970), consisting of items such as "If I believed I was having a mental breakdown, my first inclination would be to get professional attention." Items are rated from (1) *disagree* to (4) *agree*, with 5 items reversed scored so that higher scores reflect more positive attitudes. The revised and original scales are strongly correlated ($r = .87$), which suggests that they tap similar constructs (Fischer & Farina, 1995). Given the similarity between versions of the measure, the revised version was used in the present study to reduce respondent burden. The revised scale correlates with previous use of professional help for a problem ($r = .39$), and the 1-month test-retest ($r = .80$) and internal consistency ($\alpha = .84$) reliabilities have been found to be adequate. For the current study, the internal consistency of the measure was .81. Fischer and Farina have successfully used the measure to differentiate between college students with serious emotional or personal problems who did seek counseling and those with comparable problems who did not. Vogel, Wester, et al. (2005) showed that the scale has a positive association with intentions to seek counseling for psychological and interpersonal concerns ($r = .56$) and correlates negatively with self-concealment tendencies ($r = -.19$). As for the DES, three parcels were created from the scale to represent the observed indicators of attitudes toward seeking professional help.

Intentions to seek counseling for psychological and interpersonal concerns. Intentions to seek counseling for psychological and interpersonal concerns were measured with the Intentions to Seek Counseling Inventory (ISCI; Cash, Begley, McCown, & Weise, 1975). The ISCI is a 17-item measure that asks respondents to rate how likely, on a scale from 1 (*very unlikely*) to 4 (*very likely*), they would be to seek counseling if they were experiencing the problem listed. Problems include issues such as relation-

ship difficulties, depression, personal worries, and drug problems. Factor analysis of the ISCI supports the existence of three subscales within the measure, labeled Psychological and Interpersonal Concerns (10 items; $\alpha = .90$), Academic Concerns (4 items; $\alpha = .71$), and Drug Use Concerns (2 items; $\alpha = .86$), with correlations among the subscales ranging from .18 to .50 (Cepeda-Benito & Short, 1998). For the current study, only the Psychological and Interpersonal Concerns subscale (covering such topics as loneliness, depression, and inferiority feelings) was used, as attachment dimensions are significantly related to psychological distress (e.g., Lopez, Mitchell, & Gormley, 2002; Mallinckrodt & Wei, 2005), depression (e.g., Wei, Mallinckrodt, Russell, & Abraham, 2004), and loneliness and interpersonal distress (e.g., Wei, Russell et al., 2005) and, as previously stated, today's college students are increasingly concerned by psychological and interpersonal issues. Scale responses are summed, with higher scores indicating a greater likelihood of seeking counseling for psychological and interpersonal concerns. The ISCI has adequate internal consistency estimates for the Psychological and Interpersonal Concerns subscale ($\alpha = .90$; see Cepeda-Benito & Short, 1998). In the current sample, the internal consistency of the Psychological and Interpersonal Concerns subscale was .90. The ISCI has been found to detect variation in college students' intent to seek counseling on the basis of counselor attractiveness (Cash et al., 1975), correlate with the perceived significance of a current problem among those with a positive working model of others (Lopez et al., 1998), and mirror general attitudes toward seeking help ($r = .36$; Kelly & Achter, 1995). As before, three parcels were created from the interpersonal subscale to represent the observed indicators of intentions to seeking counseling for psychological and interpersonal concerns.

Procedure

Students were informed that participation was voluntary and anonymous and would involve answering questions regarding their relationships and their thoughts about seeking professional help. After providing informed consent, participants received a packet containing each of the measures as well as demographic questions. After finishing the questionnaire, participants were debriefed and then dismissed. They received extra credit in their psychology class for their participation.

Table 3
Factor Loadings for the Measurement Model

Measured variable	Unstandardized factor loading	SE	Z	Standardized factor loading
Attachment anxiety				
Anxiety 1	6.39	0.17	37.18	.92***
Anxiety 2	6.10	0.17	35.87	.90***
Anxiety 3	6.14	0.18	33.76	.89***
Attachment avoidance				
Avoidance 1	6.13	0.16	39.26	.93***
Avoidance 2	5.79	0.17	33.68	.88***
Avoidance 3	6.15	0.17	37.11	.93***
Anticipated risks				
Risks 1	1.65	0.09	17.75	.83***
Risks 2	1.53	0.09	17.55	.79***
Anticipated benefits				
Benefits 1	1.65	0.06	28.45	.88***
Benefits 2	1.82	0.06	32.13	.92***
Attitude toward seeking help				
Attitude 1	1.81	0.06	31.75	.89***
Attitude 2	1.28	0.06	19.89	.67***
Attitude 3	1.81	0.06	32.94	.91***
Intentions to seek counseling for psychological and interpersonal concerns	2.41	0.07	35.33	.90***
Intent 1				
Intent 2	1.71	0.05	33.29	.87***
Intent 3	1.67	0.05	31.38	.85***

Note. $N = 821$.

*** $p < .001$.

Results

Descriptive Statistics

Table 2 shows means, standard deviations, and zero-order correlations for the 16 observed variables. On the basis of the test developed by Mardia (see Bollen, 1989), we examined the multivariate normality of the observed variables to test whether the data met the normality assumption underlying the maximum likelihood procedure used to test the models. The result indicated that the data were not multivariate normal, $\chi^2(2, N = 821) = 321.25, p < .001$. Therefore, we used Satorra–Bentler scaled chi-square values to adjust for the impact of nonnormality in the subsequent analyses (Satorra & Bentler, 2001). We used chi-square difference tests to compare the nested models.¹

Testing Mediated Structural Models

Our primary analyses consisted of three parts. First, we followed the procedure recommended by Anderson and Gerbing (1988) to examine whether the proposed measurement model reached an acceptable fit to the data through a confirmatory factor analysis. Once an acceptable measurement model was derived, we then tested the mediated structural models. Second, on the basis of the procedure recommended by Holmbeck (1997), we compared the partially mediated structural model with the fully mediated structural model to select the best fitting mediated structural model for testing the significance level of the indirect (or mediated) effects. We used the maximum likelihood method in the LISREL (Version 8.54; Jöreskog & Sörbom, 2003) program to examine the measurement and structural models. We used the three indexes suggested by Hu and Bentler (1999) to assess the goodness of fit of the

models: the comparative fit index (CFI; .95 or greater), the root-mean-square error of approximation (RMSEA; .06 or less), and the standardized root-mean-square residual (SRMR; .08 or less). Finally, the third part of the analyses evaluated the significance levels of the indirect effects through the bootstrap procedure recommended by Shrout and Bolger (2002).

Measurement model. Our initial test of the measurement model (see Figure 1) resulted in a good fit to the data, scaled $\chi^2(89, N = 821) = 340.37, p < .001$; $\chi^2(89, N = 821) = 390.44, p < .001$ (CFI = .97; RMSEA = .059, 90% confidence interval [CI] = .052, .065; SRMR = .044). As can be seen in Table 3, all of the loadings of the measured variables on the latent variables were statistically significant at $p < .001$. Therefore, all of the latent variables appear to have been adequately measured by their respective indicators. In addition, the correlations among the independent latent variables, the mediator latent variables, and the dependent latent variable were statistically significant (see Table 4).

¹ We computed the Satorra–Bentler scaled chi-square difference test (Satorra & Bentler, 2001) to adjust for the impact of nonnormality to compare the nested models. However, one value of the scaled chi-square difference test was negative. (It is important to note that the formula for the Satorra–Bentler scaled chi-square difference test involves the normal chi-square values for the two nested models being compared, the Satorra–Bentler scaled chi-square values for these two models, and the degrees of freedom for these two models. Please see <http://www.abdn.ac.uk/~psy086/dept/psychom.htm> for the computer program SBDIFF.EXE for computer calculation or <http://www.statmodel.com/chidiff.shtml> for a hand calculation formula.) Therefore, we report the normal (or standard) chi-square difference tests for the nested model comparisons.

Table 4
Correlations Among Latent Variables for the Measurement Model

Latent variable	1	2	3	4	5	6
1. Attachment anxiety	—	.16***	.21***	.18***	.05	.21***
2. Attachment avoidance		—	.24***	-.09*	-.10**	-.11**
3. Anticipated risks			—	-.10**	-.25***	-.12**
4. Anticipated benefits				—	.53***	.53***
5. Attitudes toward seeking help					—	.57***
6. Intentions to seek counseling for psychological and interpersonal concerns						—

Note. $N = 821$.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Structural models. Holmbeck (1997) has suggested using three steps to test structural mediated models in SEM. The first step is to test the significance level of the direct effects of the predictor variables (i.e., attachment anxiety and attachment avoidance) on the dependent variables (i.e., intentions to seek help). The second step is to test the partially mediated structural model (i.e., all the indirect effects plus the two direct effects from both attachment anxiety and attachment avoidance to intentions to seek help). The third step is to test the fully mediated structural model (i.e., all the indirect effects without the two direct effects). These models are then compared (i.e., the partially structural model and the fully structural model) to see which model better fits the data. However, Frazier, Tix, and Barron (2004) and Shrout and Bolger (2002) have recently suggested that the inclusion of the first step is not necessary in certain cases. One such case involves when two mediators act in opposite directions (e.g., anticipated risks and anticipated benefits). In this case, the mediator effects may cancel each other out, resulting in a nonsignificant direct effect. Therefore, we adapted the second and the third steps in the following analyses.

We planned to first test our hypothesized structural model (i.e., a partially mediated model; see Figure 1). Next, we planned to test an alternative structural model (i.e., a fully mediated model) by removing the direct paths from attachment avoidance and anxiety to intentions to seek counseling. That is, we wanted to know whether all three mediators partially or fully mediated the relations between attachment (i.e., avoidance and anxiety) and intentions to seek counseling. Then we would use a chi-square difference test to compare these two nested models to know which was more appropriate. The test of our hypothesized structural model (i.e., partially mediated model; see Figure 1) showed a good fit of the model to the data, scaled $\chi^2(91, N = 821) = 341.45, p < .001$; $\chi^2(91, N = 821) = 390.53, p < .001$ (CFI = .97; RMSEA = .058, 90% CI = .051, .065; SRMR = .044). All hypothesized paths were significant except the direct path from attachment avoidance to intentions and the direct path from anticipated risks to intentions (see Figure 2). Next, we compared this hypothesized partially mediated model (Figure 2) with the fully mediated model. The fully mediated model constrained to zero the direct paths from attachment anxiety and attachment avoidance to intentions to seek counseling. The result of the fully mediated model, scaled $\chi^2(93, N = 821) = 365.29, p < .001$; $\chi^2(93, N = 821) = 402.52, p < .001$ (CFI = .97; RMSEA = .060, 90% CI = .053, .066; SRMR = .052) also indicated a relatively good fit of the model to the data. We then compared the two nested models by testing the significance level of the chi-square differences. The chi-square difference

test between the hypothesized partially mediated model and the fully mediated model, $\chi^2(2, N = 821) = 11.99, p < .001$, was significant. Therefore, the hypothesized partially mediated model (Figure 2)² was selected as the best fit to the data and was subsequently used in the bootstrap procedure.

Significance levels of indirect effects. The bootstrap procedure recommended by Shrout and Bolger (2002) was used to evaluate the significance levels of the indirect effects. The first step was to create 1,000 bootstrap samples ($n = 821$) from the original data set using random sampling with replacement. The partially mediated structural model was then run once with each bootstrap sample to yield 1,000 estimations of each path coefficient. We used LISREL's output of the 1,000 estimations of each path coefficient to calculate an estimate for each indirect effect. We calculated the indirect effects of attachment avoidance or attachment anxiety on intentions to seek counseling for psychological and interpersonal concerns through the anticipated risks (or benefits) and attitudes toward seeking help mediators by multiplying 1,000 pairs of three path coefficients: (a) from attachment anxiety and from attachment avoidance to anticipated risks (or benefits), (b) from anticipated risks (or benefits) to attitudes toward seeking help, and (c) from attitudes toward seeking help to intentions to seek counseling. Similarly, to estimate the indirect effect for attachment avoidance and attachment anxiety on intentions to seek counseling through the anticipated risks (or benefits) of seeking counseling, we calculated 1,000 pairings of two path coefficients: (a) from attachment avoidance and from attachment anxiety to anticipated risks (or benefits), and (b) from anticipated risks (or benefits) to intentions to seek counseling. The final step was to see whether the 95% CI for the estimate of a given indirect effect included zero. If it does not, one can conclude that the indirect effect is statistically significant at the .05 level (Shrout & Bolger, 2002).

As can be seen in Table 5, all the indirect effects were significant (i.e., the 95% CI values did not include zero) except for the

² We examined the invariance of path coefficients for structural paths in the partially mediated model by conducting SEM multiple group comparison analysis for the male and female groups. However, we did not detect any significant differences between men and women in terms of the path coefficients of structural paths in the partially mediated model. We conducted two multiple regressions to examine whether there were interaction effects between attachment orientation (i.e., anxiety and avoidance) and perceived risks and benefits in help seeking on attitudes toward seeking help or intentions to seek help. No significant interaction effects were detected for either attitudes toward seeking help or intentions to seek help.

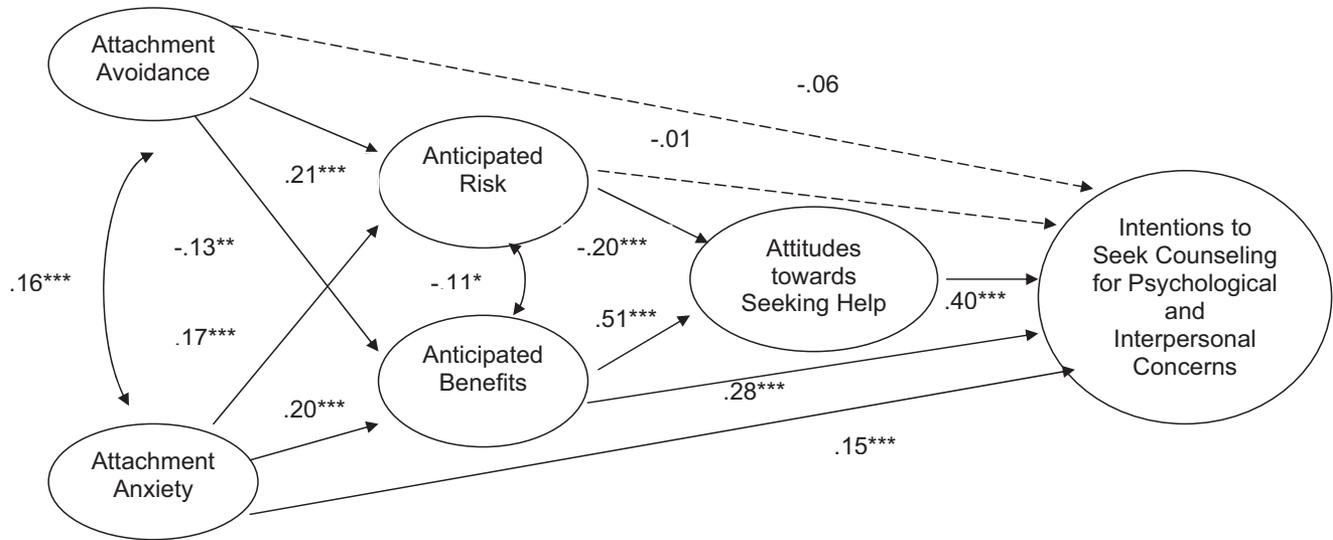


Figure 2. The final mediated model. $N = 821$. The dashed lines indicate that the paths were not significant. The numbers represent path coefficients for the indicated paths. * $p < .05$. ** $p < .01$. *** $p < .001$.

indirect effects from attachment avoidance through anticipated risks on intentions to seek counseling. Furthermore, although the direct effect of attachment anxiety on help-seeking intentions was significant and positive ($\beta = .15$, $Z = 4.84$, $p < .001$), the direct effect of attachment avoidance on help-seeking intentions was not. It is also important to note that 9% and 5% of the variance in anticipated risks and benefits, respectively, was explained by attachment anxiety and attachment avoidance; 31% of the variance in attitudes toward seeking psychological help was explained by anticipated risks and anticipated benefits; and 41% of the variance in intentions to seek counseling for psychological and interpersonal concerns was explained by attachment anxiety, anticipated benefits, and attitudes toward seeking psychological help.

Discussion

Through the use of SEM, this study provides a unique perspective on the differential ways individuals with attachment avoidance and anxiety view the risks and benefits of counseling and thus how

they construct their intentions regarding seeking professional help for psychological and interpersonal concerns. Our results indicate that individuals with higher levels of attachment avoidance consistently anticipated greater risks and fewer benefits from seeking counseling. These anticipations were then associated with less positive attitudes toward seeking professional help, which were, in turn, associated with decreased intentions to seek counseling for psychological and interpersonal concerns. In addition to this indirect effect, the anticipation of fewer benefits also directly decreased these individuals' intent to seek professional help. Conversely, individuals with higher levels of attachment anxiety held mixed views, anticipating greater risks but also greater benefits from counseling. Thus, they seemed to struggle with weighing the potential risks and benefits of seeking help. When they anticipated more risks, they were less likely to have a positive attitude toward seeking help, which, in turn, meant they were less likely to decide to seek counseling. However, when they anticipated more benefits, they were more likely to have a positive attitude toward seeking

Table 5
Bootstrap Analyses of the Magnitude and Statistical Significance of Indirect Effects

Independent variable	Mediator variables	Dependent variable	Standardized indirect effect (β)	Mean indirect effect ^a (B)	SE ^a	95% CI mean indirect effect ^a
Avoidance →	Risks → attitudes →	Intentions	$(.21) \times (-.19) \times (.40) = -.02$	-0.0066	0.00006	-0.0110, -0.0032
Avoidance →	Benefits → attitudes →	Intentions	$(-.13) \times (.51) \times (.40) = -.03$	-0.0102	0.00011	-0.0174, -0.0039
Anxiety →	Risks → attitudes →	Intentions	$(.17) \times (-.19) \times (.40) = -.01$	-0.0053	0.00006	-0.0092, -0.0022
Anxiety →	Benefits → attitudes →	Intentions	$(.20) \times (.51) \times (.40) = .04$	0.0155	0.00012	0.0089, 0.0234
Avoidance →	Risks →	Intentions	$(.21) \times (-.01) = .00$	0.0055	0.00010	-0.0064, 0.0047
Avoidance →	Benefits →	Intentions	$(-.13) \times (.28) = -.04$	-0.0012	0.00011	-0.0240, -0.0054
Anxiety →	Risks →	Intentions	$(.17) \times (-.01) = .00$	-0.0119	0.00021	-0.0055, 0.0039
Anxiety →	Benefits →	Intentions	$(.20) \times (.28) = .06$	0.0212	0.00015	0.0118, 0.0319

Note. CI = confidence interval; Avoidance = attachment avoidance; Anxiety = attachment anxiety; Risks = anticipated risks; Benefits = anticipated benefits; Intentions = intentions to seek counseling for psychological and interpersonal concerns.

^a These values are based on unstandardized path coefficients.

professional help, which increased their likelihood of seeking counseling. In addition to these indirect effects, when individuals with attachment anxiety anticipated more benefits, this directly increased their intentions to seek help.

These differential patterns for attachment avoidance and anxiety not only support our hypotheses but also fit well with attachment theory. Individuals with attachment avoidance, who have had mostly negative experiences with caregivers, have been described as developing a tendency to devalue the importance of others (Cassidy, 1994, 2000; Kobak & Sceery, 1988; Lopez & Brennan, 2000; Mikulincer et al., 2003; Pietromonaco & Feldman Barrett, 2000; Shaver & Mikulincer, 2002). Thus, it makes sense for individuals with higher levels of attachment avoidance to see fewer benefits associated with seeking counseling. Given that many individuals with attachment avoidance respond to distress with compulsive attempts to increase self-reliance (Mikulincer, 1998), the association between greater attachment avoidance and perceptions of greater risks in help seeking seems reasonable. Conversely, adult attachment anxiety has been described as a tendency to value the importance of others while fearing rejection (Cassidy, 1994, 2000; Kobak & Sceery, 1988; Lopez & Brennan, 2000; Mikulincer et al., 2003; Pietromonaco & Feldman Barrett, 2000; Shaver & Mikulincer, 2002). Therefore, individuals with attachment anxiety frequently seek out others for support but often feel uncertain about whether others would be consistently available or responsive in providing help. Consistent with this, they are likely to seek help and expect to receive benefits from it. In addition, they are ambivalent about whether others really want to help them and worry about potential rejection and abandonment by mental health professionals.

It is also important to note that for individuals with attachment avoidance, their intentions to seek counseling for psychological and interpersonal concerns were fully mediated by their cognitive process (i.e., anticipated risks and benefits) or attitudes toward seeking help. Conversely, intentions to seek counseling for psychological and interpersonal concerns among individuals with attachment anxiety were only partially mediated through their cognitive process or their attitudes. Other factors clearly influenced how these individuals developed their intentions to seek help. For example, attachment anxiety may lead to an outward focus that increases an individual's susceptibility to the social stigma attached to the help-seeking process. Such stigma has been found to be negatively associated with intentions to seek counseling for psychological and interpersonal concerns (Vogel, Wester, et al., 2005). It is possible that social stigma may serve as a mediator between attachment anxiety and intentions to seek help and that when this stigma is addressed, individuals with attachment anxiety may be encouraged to seek professional help. Future research needs to examine this and other possible mediators.

In addition to confirming these differences between adult attachment dimensions in terms of help seeking, the present results add to the help-seeking literature by providing, for the first time, empirical evidence that anticipated risks and benefits mediate the link between adult attachment and psychological help seeking. In particular, the SEM results support our hypotheses that attachment anxiety and avoidance would both be related to anticipated risks (in the same direction) and anticipated benefits (albeit in different directions), that these anticipated risks and benefits would be associated with the attitudes individuals have toward counseling,

and that these attitudes would be positively associated with individuals' intention to seek help for psychological and interpersonal concerns. Therefore, our results confirm the indirect role played by anticipated risks and benefits in contributing to whether to seek help through their effects on attitudes toward seeking help (Vogel, Wester, et al., 2005).

In addition these results suggest that if clinicians want to reach out to college students in need of services, they may need to pay attention to how attachment avoidance and anxiety contribute to a person's decision to seek counseling. Although it is beyond the scope of this article to develop a full outreach plan, the present results suggest at least two different ways attachment can contribute to help-seeking intentions. First, it appears that to the degree that individuals with attachment avoidance view others as less reliable, this leads them to perceive counseling as offering few benefits and greater risks. These perceptions, in turn, are related to less positive attitudes toward counseling and less intention to seek help. Therefore, clinicians may need to work directly to change such individuals' negative perceptions of counseling by emphasizing the positive benefits and reducing the anticipated risks of talking to a counselor (e.g., normalizing or providing corrective emotional experiences), thus improving these individuals' attitudes toward counseling. Counseling centers may need to focus on the instillation of hope as an important first step. These students may have limited experience with supportive caregivers and thus may require convincing that change and growth are possible before they will commit to seeing a counselor.

In contrast, individuals with attachment anxiety report a greater willingness to seek counseling. Their willingness is buoyed by expectations that counseling can be beneficial and hindered by fears regarding the potential risks of help seeking. In dealing with individuals with attachment anxiety, clinicians may wish to work directly with this ambivalence by supporting accurate positive expectations and explicitly discussing the true risks associated with counseling. To the degree that anxiety-related concerns are rooted in experiences with erratic and unpredictable caregivers, counseling centers may wish to emphasize that they employ trained professionals capable of providing consistent and dependable support. Students with attachment anxiety may have mixed expectations regarding counseling, and receiving a clear and positive message could be a helpful first step. We hope that these interventions can improve expectations regarding the benefits of seeking help and mollify clients' concerns regarding its risks, thus improving their attitudes toward the process and bolstering their intentions to seek counseling.

Although the results of the current study provide new and important implications for those attempting to understand the link between adult attachment and help-seeking intent, some limitations need to be noted. To our knowledge, this is the first study to explore how the link between attachment and help-seeking intentions is mediated by perceptions of risks and benefits and by attitudes toward counseling. Thus, readers should take some caution when applying these results until further research demonstrates the generalizability of our findings. In particular, researchers and clinicians should be careful when applying our findings to diverse populations. Our sample of primarily young Caucasian college students may differ in important ways from populations that are more diverse. Different cultural backgrounds may furnish different mediators (e.g., cultural mistrust) between attachment

dimensions and help seeking. Future research should examine how adult attachment contributes to the help-seeking process in different ethnic groups. Similarly, readers should avoid generalizing the results to populations other than college students until future research with other samples (e.g., community samples) examines the process of how attachment influences help-seeking decisions.

In addition, the present results are based on correlational data. Longitudinal studies or experimental designs (e.g., providing psychoeducation to explicitly discuss the anticipated benefits and risks of help seeking) featuring direct manipulation of variables would go a long way toward providing clear evidence of a causal relation. It is also important to note that the current results are based entirely on self-report measures. Replication via other methods of data collection (e.g., measuring physiological reactions when participants imagine the anticipated risks or benefits of seeking help) would be beneficial in future research. Moreover, future research should examine actual help-seeking behaviors. Although intentions have been shown to be one of the best indicators of future behavior (Ajzen & Fishbein, 1980), determining who actually seeks help is an important next step.

Beyond generalization concerns, we must also note that we did not directly assess the level of psychological distress or interpersonal problems individuals were experiencing; thus, the participants might have been experiencing a relatively low level of psychological or interpersonal distress at the time the data were collected. Given that the attachment system becomes more activated as stress levels rise, it is possible that higher levels of stress would magnify individual differences in help-seeking intentions as a result of differential use of affect regulation strategies based on different attachment dimensions (Fuendeling, 1998). Future researchers could incorporate measures of current stress into the model of attachment and help-seeking intentions.

Beyond the limitations we have noted, the present study adds at least three important pieces to the help-seeking puzzle. First, individuals with higher levels of attachment anxiety had greater intentions to seek counseling for psychological and interpersonal concerns, whereas this did not seem to be the case for individuals with attachment avoidance. Second, individuals with higher levels of both attachment anxiety and avoidance perceived greater risks from counseling. These perceptions were negatively related to the individuals' attitudes toward seeking psychological help, and these negative attitudes, in turn, were related to decreased intentions to seek professional help. Third, individuals with higher levels of attachment avoidance were less likely to acknowledge possible benefits of seeking help, which created more negative attitudes toward seeking help, thus lowering their intentions to seek counseling. Conversely, individuals with higher levels of attachment anxiety were more likely to acknowledge the possible benefits of seeking help, which created more positive attitudes toward seeking help and thus greater intentions to seek counseling. In addition, among individuals with attachment anxiety and avoidance, intent to seek help for psychological and interpersonal concerns can be mediated through the anticipated benefits of seeking counseling. Clearly, clinicians need to be aware of individual differences in attachment dimensions when calibrating their efforts to reach out to those in need of professional services.

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